## **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-007644 Address: 333 Burma Road **Date Inspected:** 19-Jun-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes No Li Zhi Jiang **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: OBG** Components

## **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Hiranch Patel, was present during the times noted above for observations relative to the work being performed.

### Bay#2 Segment 1AAE

This QA inspector witnessed UT of base metal at location A13, plate detail X-304A, performed by ZPMC UT QC. The member is identified as Segment 1AAE Components

During in process inspection of welding of internal stiffeners components of OBG Segment 1AAW, Caltrans Quality Assurance (QA) Inspector discovered at location A32, A33 and A34, Weld # Seg1C-161, Seg1C-160 and Seg1C-159, on deck plate side, should be mill to bear. ZPMC weld those stiffeners with deck plate and after that removed weld by carbon arc gouging and grinding, results damaging the deck plate. ZPMC weld seam plates on those stiffeners without repair that damaged deck plate and cover that damaged area. This QA Inspector submits a TL015 Incident report.

During in process inspection of welding of internal stiffeners components of OBG Segment 1AAW, Caltrans Quality Assurance (QA) Inspector discovered at location A32, A33 and A34, Weld # Seg1C-161, Seg1C-160 and Seg1C-159, on deck plate side, should be tight fit. ZPMC weld shim plate on those stiffeners without repair that damaged deck plate and cover that damaged area. ZPMC remove those shim plate weld by hammering on the weld and tearing the shim plate from the stiffeners. This QA Inspector submits a TL015 Incident report.

Caltrans Quality Assurance Inspector observed on Segment 1AAW, Location A-00 to A-41, welding of shim plate of 300mm x 100mm on to a stiffeners on Deck plate side, by FCAW welding without approval of an engineer.

## WELDING INSPECTION REPORT

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The location and weld numbers are as below. This QA Inspector submits a TL015 Incident report.

Location Weld# Location Weld# A-01 Seg1D-169 A-21 Seg1C-170 A-02 Seg1D-168 A-22 Seg1C-171 A-03 Seg1D-167 A-24 Seg1C-169 A-04 Seg1D-166 A-25 Seg1C-168 A-05 Seg1D-165 A-26 Seg1C-167 A-06 Seg1D-164 A-27 Seg1C-166 A-07 Seg1D-163 A-29 Seg1C-164 A-08 Seg1D-162 A-30 Seg1C-163 A-09 Seg1D-161 A-31 Seg1C-162 A-10 Seg1D-160 A-32 Seg1C-161 A-11 Seg1D-159 A-33 Seg1C-160 A-12 Seg1D-158 A-34 Seg1C-159 A-14 Seg1D-156 A-35 Seg1C-158 A-15 Seg1D-155 A-36 Seg1C-157 A-16 Seg1D-154 A-37 Seg1C-156 A-17 Seg1D-153 A-38 Seg1C-155 A-18 Seg1D-152 A-39 Seg1C-154 A-19 Seg1D-151

Bay #2, Segment 1AAE

A-20 Seg1D-150

This QA inspector observed the following work in progress:

FCAW welding of weld joint Seg2F-004, Seg2E-046 located A-00 on Segment 1AAE. Welder is identified as 048433 (3G). ZPMC QC-CWI is identified as Li Zhi Jiang. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Unless otherwise noted, all observed on this date appeared to generally comply with applicable contract documents.

# **Summary of Conversations:**

No relevant conversations.

#### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Patel, Hiranch	Quality Assurance Inspector
Reviewed By:	Prue,Erik	QA Reviewer